STATE OF IOWA

DEPARTMENT OF COMMERCE

UTILITIES BOARD

IN RE:

IES UTILITIES INC., n/k/a INTERSTATE POWER AND LIGHT COMPANY

DOCKET NO. PSA-01-1

ORDER ADDRESSING PLAN FOR CORRECTIVE ACTION

(Issued March 12, 2002)

PROCEDURAL BACKGROUND

On December 13, 2001, the Utilities Board (Board) issued an order opening a docket concerning violations of federal and Board pipeline safety regulations by IES Utilities Inc., n/k/a Interstate Power and Light Company (IES). In the order, the Board described six specific areas where IES had not complied with safety regulations and found that an overall review of the violations showed a pattern on the part of IES of failing to ensure that proper safety procedures were followed and that proper records were kept.

The Board ordered IES to file a report by January 31, 2002, containing a plan for corrective action and to take the corrective action indicated by the plan. The Board also ordered IES to file monthly progress reports showing the corrective action taken and providing an explanation of why any scheduled corrective action was not completed. In addition, IES is to file a report on July 31, 2002, that describes the

actions to be taken by IES to ensure compliance with federal and Board safety regulations after July 31, 2002.

On January 30, 2002, IES filed the required report detailing the corrective action to be taken to correct the violations described in the Board's December 13, 2001, order. The report indicates that IES will file monthly progress reports on or before February 18, 2002, March 18, 2002, April 22, 2002, May 20, 2002, June 17, 2002, July 22, 2002, and August 19, 2002. IES then states that additional monthly reports will be filed with the Board on progress related to IES' remaining corrective actions planned concerning emergency shut-off valves at farm taps on or before September 23, 2002, October 21, 2002, November 18, 2002, and December 23, 2002. On February 19, 2002, IES filed the first monthly progress report.

The Board has reviewed the corrective action plan that details the actions to be taken by IES to correct the violations described in the Board's December 13, 2001, order. The Board will address the actions proposed below for each of the violations.

CORRECTIVE ACTION FOR VIOLATIONS

Mr. Jim House, the Lead Gas Engineer, has been assigned to coordinate compliance with federal and Board pipeline safety requirements. The Board's experience since the assignment of Mr. House is that he has been aggressively following up on past inspection reports and submitting reports to Board staff on the progress of corrective actions. The addition of Mr. House to coordinate and facilitate

the keeping and filing of inspection reports and other matters involving the Board should help IES to comply with safety regulations.

I. Leak Surveys

In 1999, a pipeline safety code compliance inspection of IES' Belmond District by Board staff found no record that leak surveys required by 49 CFR 192.723 had been performed between August 5, 1993, and February 10, 1997. Although some records were subsequently found, areas remained where there was no evidence of a leak survey. By letter dated July 27, 1999, Don Stursma, Manager of the Board's Safety and Engineering Section, informed IES that the Belmond area should be leak surveyed as soon as possible. IES did not respond to that letter, and in the next Board staff inspection in 2001, it was found leak surveys of those areas still had not been performed.

In the corrective action plan, IES concedes that its records were inadequate, but believes the leak surveys were conducted in the 1993-1997 period although no records have been located. IES asserts that the appropriate IES personnel were not aware of the existence of the July 27, 1999, letter from Don Stursma until the May 2001 inspection of the Belmond District. Subsequently, IES states that it hired a contractor and leak surveyed all towns in the Belmond District. The surveys found no Class 1 (high hazard) or Class 2 (moderate hazard) leaks and 35 Class 3 (non-hazardous) leaks.

The corrective action plan for this violation includes: (1) specific members of the Belmond crew have been assigned responsibility for record keeping maintenance, (2) instead of leak surveying the entire district every five years, 20 percent will be done annually, and (3) Mr. Jim House, the lead gas engineer, will be responsible for disseminating letters and reports from Board staff to the appropriate personnel and will coordinate all responses.

The Board finds that the actions described above are reasonable and will hopefully enable IES to prevent future violations of leak survey requirements in the Belmond District. It appears that the Belmond District is now in compliance with leak survey requirements. Future inspections will determine if the above measures are successful in preventing recurrence of this problem. The absence of a gas foreman for the Belmond District may also be a cause of some of the failure to comply with gas safety requirements. It is the Board's understanding that the gas foremen in other districts attend meetings where the inspection reports are discussed and the foremen are a primary conduit of this information to field staff. IES should ensure that the Belmond District is not put at a disadvantage because of the absence of a gas foreman.

II. Corrosion Control

In a 1999 inspection of IES' lowa Falls District, two cathodic protection zones in the town of Wellsburg were found to have been below the protection levels required by 49 CFR 192.465 for four consecutive years. The next inspection of this district in 2001 still found no record of attempted corrective action and low readings again in 1999 and

2000. In addition, ten zones were found in other towns that were deficient in both 1999 and 2000, and in six of those zones there was no record of attempted corrective action.

IES concedes that there were deficiencies in meeting corrosion control requirements and in documenting remedial actions in Wellsburg and other towns in the lowa Falls area. Even though it had created a Corrosion Control Technician position and implemented a Corrective Maintenance Order (CMO) procedure to document work needed and completed, IES states that the technicians and local gas crews were inconsistent in filing these reports. IES states that all deficient zones were brought into compliance, or in some cases rebuilt with plastic pipe, by late 2001. The corrective action plan for this violation is to provide additional instruction on proper CMO filing procedures and to require that a second copy of each CMO be filed in Marshalltown, where the centralized corrosion control program is directed. The result of this corrective action is that records should now be available at two locations.

The Board finds that the corrosion control deficiencies cited in the Iowa Falls

District inspection reports have apparently been corrected. The corrective action plan,
however, consists of requiring employees to file two copies of records. There still
appears to be no mechanism to ensure that the documentation is filed. IES
supervisory personnel will have to ensure that the two sets of records are filed or the
corrective action plan will not succeed.

A Board staff inspection of the Muscatine District in late 2001 found district personnel did not have an effective system in place to file CMOs with corrosion control

deficiencies. Problems may continue without some additional controls to ensure record keeping is completed.

III. Emergency Shutoff Valves

Beginning in 1999 numerous instances were found where farm taps, designed to reduce pipeline pressure to serve one customer along a pipeline route, were serving multiple customers. The main problem was that the farm taps did not have emergency shut-off valves located at a safe distance from the station as required for district regulator stations serving multiple customers. In the corrective action plan, IES concedes that there are numerous locations where more than one customer is being served from a single farm tap. IES asserts that this was in part due to the anticipation of a change in the federal pipeline safety standards that would have allowed multiple customers to be served from a single farm tap. In August 2001, IES initiated a process to identify the stations where the violations were occurring. IES states that it has found 287 possible locations and is taking the following corrective action:

- For the stations identified, IES will determine if, upon further review, the station can be classified as a single customer farm tap.
- 2. For those stations identified, IES will (1) bring the station into compliance, including installation of an emergency shutoff valve, and comply with the federal and IES operation and maintenance standards for district regulator stations; (2) install additional farm taps so each customer is served individually; (3) retire the farm tap and run distribution mains to serve the

customers; (4) install individual customer regulators at the farm tap and run individual services; or (5) use some combination of the above.

- 3. To prevent recurrence, an Engineering Bulletin will be issued by February 28, 2002, which will be reviewed with gas personnel and covered in training sessions.
- 4. IES will compress its original multi-year compliance schedule.

 Locations previously identified by Board staff will be corrected by July 31, 2002, all others known to exist as of July 31, 2002, will be corrected by the end of 2002, and any discovered after July 31, 2002, will be corrected within six months of discovery.

The Board is aware of a federal rule making initiative to revise the definitions of "service line" and "service regulator" to better reflect actual utility industry practices.

(Research and Special Programs Administration, Docket No. PS-124). However, none of the proposals in that proceeding would allow a farm tap to serve as a district regulator station and IES must comply with the safety regulations, as they exist today regardless of how they may be amended in the future.

The corrective action plan indicates that IES intends to review farm taps serving multiple customers and will exclude those found to have two meters serving a single customer from the plan. These farm taps would apparently be those where a farm has both a residential and a commercial meter, but with one person responsible for both bills.

There is some question whether IES can exclude those farm taps that have two meters but one responsible customer. The federal definition of a "service line" clearly anticipates service to only one customer meter. This issue was raised in 1990 in Minnesota where the Office of Pipeline Safety (OPS) was informed of the difficulty of enforcing this definition when lines were found designed as service lines but serving two customers. The fact situation was somewhat different from the one faced by IES. The Minnesota facts involved service lines that split to serve two customers, not the IES situation of one customer with two meters.

OPS responded by letter dated March 7, 1990, stating that it was aware of the issue and intended to address it in an upcoming rule making, Docket No. PS-124, and further stating that until the Part 192 regulations are changed to clarify their application to branch service lines, OPS concurred with the Minnesota decision not to cite operators for violating requirements governing mains that can be interpreted to apply to portions of branch service lines. Based on the OPS letter to Minnesota, the Board will accept IES' corrective plan for customers with two meters. In addition, the Board approves the proposal to correct all the farm taps by the end of 2002, recognizing that this is a very aggressive schedule that may be difficult to meet.

IV. Response to Leak Calls

Safety code compliance inspections in 1999 found problems with response times to leak calls. The Board considers a pattern of response times longer than one hour, without mitigating circumstances, a violation of 49 CFR 192.615(a) and

199 IAC 19.8(4). In 2001 significant numbers of leak call response times of over one hour were discovered in the Spirit Lake and Creston Districts.

In the corrective action plan, IES concedes that sufficient action has not been taken to address leak calls with over 60-minute response time even though expectations have been set for the last two years that operations managers review all responses longer than 50 minutes. IES states that this has not successfully addressed problems in certain zones. In October 2001 IES formed a team to address this issue. The team found some problems were related to overall process and others were unique to certain areas.

Several changes have been implemented by IES. Callout rosters were established in the Socrates dispatching system used at the Distribution Dispatch Center (DDC) so that the closest available person rather than the standby person would be called. If a responder's response time is expected to be more than 30 minutes, DDC resource coordinators will check if another person may be available who could respond more quickly, while the first responder would continue to respond. The responder who arrived first would then call off the other responder. Daily reports of response times will be sent to managers who are then required to review all responses over 50 minutes and take follow-up action if appropriate. Managers will have specific goals for minimizing response times of over 60 minutes.

In the Spirit Lake District, IES will make sure that work assignments will take into account the geographic locations of persons available to respond to gas emergencies and that managers have been directed to bring in additional resources to

provide backup when the normal responder is unavailable. IES is also investigating if additional response personnel could be made available, if union jurisdiction requirements could be changed to more fully utilize personnel, whether to use local heating and plumbing contractors as responders, and whether to develop mutual assistance procedures with other utilities.

In the Creston District a person has been reassigned to improve response times during working hours. To improve coverage during non-working hours, a fourth standby circle has been created to reduce the area of coverage and improve response time. Mutual assistance with other utilities is also being considered.

The Board considers the development of a new tracking system as a positive step that should make the process of finding and documenting calls exceeding 50 minutes much simpler. However, the system will only improve response time if the information is then used to examine the causes of long response times and with follow-up action taken where appropriate.

The Board recognizes that in some cases a long response time may have a legitimate cause, such as odorant spills that generate numerous calls, bad road conditions, and incorrect or incomplete addresses. In other cases the long response time may point to a problem in how calls are assigned. This was the problem that the Board noted in its December 13, 2001, order, where leak calls were being dispatched to persons with long drive times and others were assigned to persons already responding to another leak call

The Board has two concerns about the corrective actions to be implemented by IES. First, it is not clear if the 50-minute response times being reported by the DDC are times from when a call is first received to when IES personnel arrives or if the time begins when the call is dispatched. The Board understands that dispatch is supposed to be within 15 minutes of when a call is received, but if the time to dispatch is not included in the response time, the response time reported may not accurately reflect the time it took to respond to the leak call.

Second, if heating and plumbing contractors are used, the federal regulations at 49 CFR 199 will require they be included in IES' drug and alcohol testing program.

Also, IES will be required to ensure the contractors have the proper equipment. The Board will expect IES to address these two concerns in the next scheduled monthly progress report.

V. Maximum Allowable Operating Pressure

Under 49 CFR 192.619, 621, and 623, each pipeline must have an established Maximum Allowable Operating Pressure (MAOP), which is essentially a system pressure rating. The Board noted in its December 13, 2001, order that in ten of 13 inspections MAOP problems were found ranging from missing, incomplete, or incorrect records to discrepancies with the records used for pressure control and overpressure protection.

In the corrective action plan, IES recognized that MAOP records for some locations were either incorrect or conflicted with the data found. IES states that it has completed a comprehensive listing of gas transmission and distribution systems. This

centralized list provides an inventory of all MAOP ratings and operating pressures and a cross-reference to aid in eliminating discrepancies between the two sets of data.

Any conflicting data is to be corrected and capacity calculations verified by May 1, 2002. IES has also established a communications process to keep the two databases consistent.

IES indicated that many instances of inadequate documentation were for farm tap locations not previously classified as regulator stations. IES intends to bring these farm taps into compliance with MAOP and regulator station requirements. IES also stated that it is converting to a new software package for regulator and relief valve capacity calculations.

The Board finds that the corrective action outlined in the plan for MAOP documentation is acceptable. With a centralized list and a new tracking system, violations should be minimized.

VI. Pressure Tests

The Board in the December 13, 2001, order cited numerous instances where pressure tests of newly installed pipelines either did not comply with 49 CFR 192, Subpart J, or with the additional or more stringent provisions of IES' own testing procedures. IES, in the corrective action plan, agrees that instances of inadequate pressure tests have occurred over the past several years, but points out that the number of violations declined in 2000 and 2001.

IES states that it will continue a formalized internal self-audit process to identify improperly conducted pressure tests. IES states that in 2001 in one district this

method identified 128 improper tests and these mains or services were retested. IES states that field employees have been trained in testing procedures on multiple occasions and if additional training is needed, a new process will be initiated requiring field-engineering staff to review the results from each pressure test. This process is scheduled to begin in March 2002. Finally, IES states that if inadequate pressure tests are discovered for tests conducted in 2000 and beyond, the line will be retested to current IES procedures.

The Board finds that the reduction of the number of inadequate pressure tests may be due to the training provided by IES for its personnel. IES did not address whether it provides training to contractors and whether it monitors their pressure tests. In addition, the procedures presented by IES are not clear concerning whether the internal self-audit and field engineering staff reviews are separate processes, whether IES will be providing the additional training to begin March 2002, and whether IES will retest where the results meet federal standards but not IES' own more stringent standards. IES will be directed to address these questions in its next monthly progress report.

VII. Pattern of Violation

The Board in the December 13, 2001, order concluded that the specific violations described above and the overall review of the violations found by staff during inspections for the years 1999, 2000, and 2001 show a pattern on the part of IES of failing to properly supervise its employees to ensure that proper safety procedures are undertaken and a failure of IES to ensure that records are properly

maintained. The Board also stated that IES had failed to provide follow-up responses detailing corrective action taken as promised.

In the corrective action plan, IES indicates that the frequency of violation in Board staff inspections has been decreasing, but IES recognizes a need for significant improvement in the areas of: (1) proper supervision, (2) record keeping, and (3) follow-up response. IES states that it will take the following corrective action to improve its procedures:

- 1. Appointment of Mr. Ed Greiner to a new position of Operations Specialist (Gas). His duties will include increasing overall attention to gas operations, identifying and improving field activities, record keeping, and improving business processes.
- 2. Each Operations Manager will have specific personal compensation goals in 2002 to assure employees are held accountable for implementing the Board's order and IES' plan. Gas personnel will be warned that habitual non-performance will result in disciplinary action.
- 3. As described earlier, Mr. Jim House has been assigned responsibility for responding to Board inspection reports.
- 4. Implement a number of procedure and process improvements, including a system for tracking deadlines for responses to the Board, establishing dedicated maintenance crews, and making IES plans and procedures available by computer.

- 5. Allocate in the budget \$470,000 to new incremental initiatives for operations and maintenance, which includes \$100,000 for fire valves at farm taps.
- 6. Allocate \$3,173,000 in capitol improvements to gas system infrastructure in 2002.

The Board finds that increased supervisory responsibility addresses one of the issues raised in the pattern violation. The designating of Mr. Greiner and Mr. House shows an increased focus on gas safety matters. IES should ensure that these men have the necessary expertise to address the issues necessary to comply with safety requirements. The Board has noted a problem in the past where personnel whose experience was in electric safety operations are given responsibility for compliance with gas safety requirements. Also, it appears Mr. Greiner will need to work closely with Mr. House to ensure that the findings of Board staff inspections are communicated and corrective actions taken, company-wide. Coordination between these two positions will be essential for IES to be successful in reducing violations. The Board understands that both Mr. Greiner and Mr. House will only be responsible for lowa operations and can concentrate on complying with safety regulations on the company's lowa system.

The other actions that IES indicates it will undertake should help in addressing the pattern of violations. Some of the actions do not appear to be directly related to either the specific violations or the pattern identified by the Board. Some of the construction projects or replacement activities do not appear to be related to safety.

Even so, it appears that IES is focusing more attention on its Iowa gas operations and providing more resources to address problems that have occurred or might occur in the future.

With regard to past violations of pipeline safety standards, IES has apparently made a serious effort to respond to deficiencies found in past staff inspection reports. For examples, leak surveys have finally been conducted in the Belmond District and corrosion control deficiencies appear to have been remedied. Also, Mr. House has filed a series of long-overdue letters on the status of corrective action on deficiencies identified in staff reports over the last several years.

The corrective action plan and future compliance with safety regulations will depend on the good faith efforts of IES personnel. The corrective action plan does not contain quantifiable measures of performance with the exception of the timetable for responding to farm tap issues. For the Board to understand all aspects of the corrective action plan and to determine compliance with the December 13, 2001, order, IES will be directed to provide additional information.

The additional information is to be provided in response to the following questions:

- 1. Does IES intend to provide the Belmond District with a gas foreman and, if not, how will it ensure that the Belmond District receives the same flow of information and supervision as the other districts?
- 2. How will IES ensure that the two sets of corrosion control records are being filed?

- 3. Do the reported response times for leak calls include the total time from when a call is taken to when a serviceperson arrives or from when the serviceman is dispatched until their arrival?
- 4. If heating and plumbing contractors would be designated as emergency responders for gas leak calls, how would this program be implemented? Would the contractors be included in IES' drug and alcohol testing program under 49 CFR 199 and how will IES ensure that the contractors have the necessary equipment to respond to leak calls?
- 5. How will the conversion to a Windows-based program for regulator and relief valve capacity calculations remedy the problem of discrepancies between the data used for such calculations and the maximum allowable operating pressure records?
- 6. Will the self-audits and staff reviews to determine the adequacy of pressure tests be performed by separate personnel, or is the review by the engineering staff the self-audit?
- 7. What measures will be taken to insure that contractors are aware of IES' testing requirements, and will tests by contractors be monitored by IES inspectors capable of recognizing if the proper test procedure was being followed?
- 8. Is the determination of an inadequate pressure test based upon IES test standards as well as federal minimum pipeline testing standards?

9. What procedures ensure that the responsibilities assigned to Mr. Greiner and Mr. House are properly coordinated and information is exchanged?

ORDERING CLAUSES

IT IS THEREFORE ORDERED:

- 1. IES Utilities Inc., n/k/a Interstate Power and Light Company, shall provide the responses to the questions set out in this order with the next monthly progress report.
- 2. Acceptance of the plan for corrective action filed by IES Utilities Inc., n/k/a Interstate Utilities Inc., on January 30, 2002, is conditional on the responses received by the Board and the compliance with the corrective actions in the plan.

UTILITIES BOARD

	/s/ Diane Munns
ATTEST:	/s/ Mark O. Lambert
/s/ Judi K. Cooper Executive Secretary	/s/ Elliott Smith

Dated at Des Moines, Iowa, this 12th day of March, 2002.